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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/600,145	07/10/2000	HIROKI NAKAHARA	9319S-000137	7749

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EXAMINER

DUONG, THOI V

ART UNIT PAPER NUMBER

2871

DATE MAILED: 09/11/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/600,145

Applicant(s)

NAKAHARA ET AL.

Examiner

Thoi V Duong

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 ~~is~~/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 ~~is~~/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Objections

1. Claim 7 is objected to because of the following informalities: on line 10 of the claim, " a second electrode pattern formed on said first substrate" should be --a second electrode pattern formed on said second substrate-- according to Fig. 2. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, and 7-14 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 56-20927 (JP'927).

As shown in Fig. 1, JP'927 discloses a display apparatus comprising:

a first substrate 5;

a first substrate terminal 7 formed on said first substrate;

a first electrode pattern 6 formed on said first substrate and electrically connected to said first substrate terminal;

a second substrate 1;

a second substrate terminal 8 formed on said second substrate;

an input terminal 9 formed on said second substrate and electrically connected to said second substrate terminal;

a second electrode pattern 2 formed on said second substrate and electrically connected to said input terminal;

and a conductive material 13 sandwiched between said first and second substrates and electrically connecting said first and second substrate terminals,

wherein said first substrate is disposed opposite said second substrate such that said first and second electrode patterns intersect;

wherein said first substrate terminal is disposed adjacent a first edge of said first substrate;

wherein said first electrode pattern extends toward a second edge of said first substrate which is opposite said first edge;

wherein said first substrate terminal and said second substrate terminal linearly extend away from said first edge of said first substrate;

wherein said input terminal further comprises: a first input terminal 9 formed on said second substrate; and a second input terminal 4 formed on said second substrate outboard of said first input terminal;

wherein said second electrode pattern is electrically connected to said second input terminal, wherein said first input terminal is disposed adjacent an edge of said second substrate; and

wherein said first substrate terminal is disposed adjacent an edge of said first substrate.

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4. Claims 4-6 are rejected under 35 U.S.C. 102(a) as being anticipated by Kobayashi (USPN 5,959,713).

As shown in Figs. 2-4 and 7, Kobayashi discloses a LCD apparatus comprising: a first substrate 1 having a first terminal 8 for conduction between substrates, located adjacent to an edge of the substrate, and having a first electrode pattern 8 which is electrically connected to said first terminal for conduction between substrates and which is arranged so as to extend toward an edge opposing the edge to which said first terminal for conduction between substrates is adjacent; and a second substrate 2 having a terminal 12 for input from an outside, located adjacent to the edge of the substrate, a second terminal 21 for conduction between substrates, and a second electrode pattern 7, the substrates located in an opposed manner so as to extend in a direction in which said first electrode pattern and said second electrode pattern intersect with each other,

wherein a driving IC 13 is mounted on a second substrate, an input terminal 12 being electrically connected to said terminal for input from the outside, and an output terminal 11 being electrically connected to said second terminal for conduction between substrates and said second electrode pattern (col. 5, lines 55-63);

wherein said first terminal for conduction between substrates and said second terminal for conduction between substrates are electrically connected to each other by a conductive material 31 sandwiched between said first substrate and said second substrate (Fig. 7);

wherein said first terminal for conduction between substrates and said second terminal for conduction between substrates are located linearly toward an edge opposing the edge in which those terminals are formed; and

wherein image data is supplied to said first electrode pattern, and a scanning signal is supplied to said second electrode pattern (col. 6, lines 36-46).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3, 15, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP'927 in view of Kobayashi (USPN 5,959,713).

JP'927 discloses a display apparatus that is basically the same as that recited in claims 3, 15, and 16 except for a driving signal and a driving IC mounted on the second substrate. As shown in Figs. 2-4, Kobayashi discloses a LCD apparatus 10 comprising a driving IC 13 mounted on a second substrate 2, wherein power and driving signal for driving the liquid crystal are sent to an input terminal 12 and the driving IC 13, and a desired image is displayed when a voltages are applied to electrode patterns 6a, 7a (col. 6, lines 36-46). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the display apparatus of JP'927 with the teaching of Kobayashi by employing a driving IC on the second substrate for driving signal and controlling the orientation condition of the display.

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Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thoi V. Duong whose telephone number is (703) 308-3171. The examiner can normally be reached on Monday-Friday from 8:00 am to 4:30 pm.

Thoi Duong



08/29/2002



William L. Sikes
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